

第 1583 回 天文学教室談話会

2016 年 3 月 9 日 (水) 16:30 より

東京大学理学部 1 号館西棟 11 階 1109 号室 (天文学専攻会議室) にて

“Formation and Compositions of Planet Interiors and Atmospheres:
Discoveries from Kepler, K2, and Beyond.”

Erik Petigura (Hubble Fellow/Caltech)

I will give an overview of the current state of exoplanet astronomy, highlighting some of the major achievements of the recently completed Kepler mission. Today, K2 is building upon that rich legacy by surveying 14x more sky than Kepler, casting a wide net for planets around nearby bright stars that are more amenable to precise characterization. I will present some of my group's latest K2 efforts, including a program to study sub-Saturns: a mysterious class of planets between Neptune and Saturn size, not present in our Solar System. These planets have mean densities ranging from 2.0 g/cc (concrete) to 0.05 g/cc (Styrofoam) and offer an intriguing window into the processes that form and sculpt planetary systems.